

#### **GOVERNMENT OF GUAM**

# DEPARTMENT OF PUBLIC HEALTH and SOCIAL SERVICES DIPATTAMENTON SALUT PUPBLEKO YAN SETBISION SUSIAT 123 Chalan Kareta, Mangilao, Guam 96923



### GUAM PUBLIC HEALTH LABORATORY GUIDELINES

## SPECIMEN REQUIREMENTS FOR DETECTION OF INFLUENZA A and B

Methodology:	QuickVue Influenza A+B test
Performed at GPHL Lab:	The QuickVue Influenza A+B test is a rapid, in vitro immunoassay membrane test for the direct and qualitative detection of influenza A and B viral antigens from respiratory specimens of symptomatic patients. It is a differentiated test, and therefore influenza A viral antigens can be distinguished from influenza B viral antigen in a single test. The test is to be used as an aid in the diagnosis of influenza A and B viral infection.
	Clinicians should suspect Novel Influenza A (H1N1) in person with ILI who:
	<ol> <li>Have had close contact with a person who is a swine-origin influenza confirmed case; OR</li> <li>Traveled to a community in the United States or internationally where there are one or more confirmed swine-origin influenza cases; OR</li> <li>Resides in a community where there are one or more confirmed swine-origin influenza A (H1N1) cases; OR</li> <li>Patients presenting with sepsis syndrome (unexplainable); OR</li> <li>Patients presenting with respiratory distress syndrome.</li> <li>ILI is defined as fever (temperature of 100°F (37.8°C) or greater) and a cough</li> </ol>
For private	and/or a sore throat in the absence of a KNOWN cause other than influenza.  Specimen Submission Guidelines: For Confirmatory Testing
clinics and providers:	Submit two (2) samples in M4 media (M4 media will be provided by PH upon request). Refer to Specimen Collection instructions below for acceptable specimens.
	2. Fill out required form(s) COMPLETELY (GPHL Influenza Submission Form AND other required forms). Send forms with the specimen.
	3. Specimen should be kept at 2-8°C (refrigerator temperature).
	4. Call GPHL Central Laboratory at 735-7153/735-7158/735-7355 to request
	specimen pick-up.

Specimen	Preferred respiratory specimens:
Required:	<ol> <li>Nasal swabs</li> <li>Nasopharyngeal swabs / aspirates</li> <li>Nasal wash / aspirates</li> </ol>
Specimen Collection:	Supply <b>THREE</b> (3) separate specimens of the same sample type:
	Swab # 1 = NSS for rapid screening test Swab # 2 = M4RT for confirmatory Swab # 3 = M4RT for PCR
	Use only Dacron swabs provided in the collection kit. No substitution of swabs.
	For Nasal Sample – To collect a nasal swab sample insert the sterile swab into the nostril that presents the most secretion under visual inspection. Using gentle rotation, push the swab until resistance is met at the level of the turbinates (less than one inch into the nostril). Rotate the swab a few times against the nasal wall.
	<b>For Nasopharyngeal Sample</b> – To collect a nasopharyngeal swab sample, insert the sterile swab into the nostril that presents the most secretion under visual inspection. Keep the swab near the septum floor of the nose while gently pushing the swab into the posterior nasopharynx. Rotate the swab several times.
	For Nasal Wash or Aspirate Sample –
	• For Older Children and Adults:
	With the patient's head hyper-extended instill about 2.5 ml of sterile normal saline into one nostril with a syringe. To collect the wash, place a clean, dry specimen container directly under the nose with slight pressure on the upper lip. Tilt the head forward and allow the fluid to run out of the nostril into the specimen container. Repeat for the other nostril and collect the fluid into the same specimen container.
	• For Younger Children:
	The child should sit in the parent's lap facing forward with the child's back against the parent's chest. The parent should wrap one arm around the child in a manner that will restrain the child's body and arms
	Fill an aspiration bulb or bulb syringe with up to 2.5 ml of sterile normal saline (depending on the size of the child), and instill the saline into one nostril while the head is tilted back. Release the pressure on the bulb to aspirate the specimen back into the bulb. Transfer the specimen into a clean, dry specimen container. Repeat the process for the child's other nostril and transfer the specimen into the same specimen container.
	Label each specimen with a unique identifier, type of specimen and date of collection.
	Place Swabs in biohazard specimen transport bags and seal. Place Submission form in outside pouch.

Specimen
Transport,
Storage and
Stability

#### A. For Rapid Testing

- Place swab in normal saline solution immediately after collection. Normal saline solution will be supplied by GPHL laboratory upon request.
- Specimens must be **refrigerated at 2-8°C immediately** after collection. (Specimen is stable at 2-8°C for 8 hours.)
- Specimens must be transported to the laboratory in cold packs.
- If the specimen cannot be transported to GPHL within 8 hours (e.g. collected after 4PM )-
- All respiratory specimens should be kept at 4°C until they can be placed at -20°C or below. If a -70°C freezer is not available, specimens should be kept at 4°C, preferably no longer than 48 hours. Clinical specimens should be shipped on dry ice in appropriate packaging.
- Call GPHL laboratory for pick-up at 735-7355/7357153 or deliver specimen to Central Public Health Laboratory **no later than 4 PM.**

#### **B. For Confirmatory Testing**

- Submit samples in M4 transport media. M4 media will be supplied by GPHL laboratory upon request.
- Transport specimen to the laboratory with cold packs (2-8°C).
- Specimens must be **refrigerated at 2-8°C immediately** after collection. Specimen is stable at 2-8°C for 8 hours.
- If the specimen cannot be transported to GPHL within Eight (8) hours after collection, it should be frozen at -20°C.
- Call GPHL laboratory at 735-7355/735-7153 to arrange for specimen pick-up no later than 4PM.

# • Specimen Submission

The submitting facility must notify BT Technologist or alternate of GPHL at (671) 735-7153/158/355

NOTE: It is the responsibility of the submitter to track the arrival of the specimens along with the Influenza Specimen Laboratory Submission form at GPHL to ensure that these specimens are received by the Laboratory staff.

Rejection	Specimen quantity is insufficient to perform the test;
Criteria	• Dry swabs
	• Specimen received in a container that is leaking.
	• Specimen is not collected in a proper container or special handling instruction is not followed;
	• Transport media is expired;
	<ul> <li>Specimen is not received at 2-8°C/ packed on cold packs;</li> </ul>
	• Specimen left at 2-8°C for more than 8 hours.
	• Swab with calcium alginate, wooden shafts, cotton-tipped;
	Specimen subjected to freeze-thaw cycle.      Unlabelled grazing and a second sec
	• Unlabelled specimens; • Ullegible/incomplete Submission for
	<ul> <li>Illegible/ incomplete Submission forms (e.g., no date of onset, travel history, etc.)</li> <li>Specimen label does not match the Submission form.</li> </ul>
Submission Form (Rapid Testing)	Influenza Specimen Laboratory Submission Form
	• Each specimen submitted must have a completed Submission Form, with the patient name, patient identification number, type of specimen, date/time of collection, submitter, date of onset, travel history, date shipped/sent to GPHL, test(s) requested and other pertinent information
	• Illegible submission forms that are not consistent with the specimen submitted will be rejected and requesting facility will be asked to re-submit.
	• Submission forms must not be in direct contact with the specimen(s).
For RT-PCR	• Fill out required form(s) <b>COMPLETELY</b> .
& Confirmatory Testing	• Incomplete forms will be rejected.
Result Notification:	Laboratory reports will be forwarded to the submitting facility, territory epidemiologist, and the BCDC Administrator via FAX
	Any other request for copies of laboratory reports, apart from that stipulated above will not be accepted.
Contact:	Joy S. Villanueva, Chemical Terrorism Medical Technologist 1, GPHL (671) 735-7153 /158 (671) 735-7158 FAX
	joy.villanueva@dphss.guam.gov
	Alan Mallari, Laboratory Technician 11 GPHL (alternate) (671) 735-7153/355 alan.mallari@dphss.guam.gov
	Josephine T. O'Mallan. BCDC Administrator, Guam Department of Public Health & Social Services (671) 735-7142; (671) 888-9276 (emergency) Josephine.omallan@dphss.guam.gov

(Revised 5/26/09)

#### References:

- 1. CDC Interim Guidance for Screening for Novel Influenza A (H1N1) (Swine Flu) by State and Local Health Departments, Hospitals and Clinicians in Regions with Few or No Reported Cases of Novel Influenza A (H1N1). May 1, 2009
- CDC Interim Guidance on Specimen Collection, Processing and Testing for Patients with Suspected Swine-Origin Influenza A(H1N1) Virus Infection. April 30, 2009
- 3. CDC Interim Guidance on Case Definitions to be Used For Investigations of Swine-Origin Influenza A (H1N1). April 30, 2009

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